REMARKS

Claims 1-36 are currently pending in the patent application. The Examiner has rejected Claims 1-36 under 35 USC 103 as unpatentable over Rowney in view of Sudia. For the reasons set forth below, Applicants respectfully assert that all of the pending claims, as amended, are patentable over the cited prior art.

The present invention is directed to an enterprise-based system for processing transactions wherein a transaction management system automatically creates an electronic transaction comprising an electronic representation of the transaction and a plurality of verifiable anonymous role certificates comprising at least one verifiable anonymous role certificate for each of the plurality of roles for which approval is required to be completed to obtain authorization of the transaction. The electronic transaction is then routed to obtain the relevant approvals which comprise completed role certificates, followed by verifying the authenticity of the completed role certificates against stored role certificates with corresponding signatures. The term "role certificate" is a specific term which was defined in the Specification from

the bottom of page 8 to the bottom of page 10, and is a certificate which represents the role, and not the person, from which approval must be obtained for authorization of the transaction. The role certificates are anonymous (see: page 9, lines 1-page 10, line 1) so that authorization is associated with a role and not a person. Once completed role certificates are returned, they are compared to stored role certificate/signature pairs to verify that the completed role certificate has been completed by an authorized person in that role.

Applicants have amended that language of many of the independent claims to highlight the fact that the role certificates which are part of the electronic representation of the transaction are anonymous and that a plurality of the anonymous role certificates are associated with a transaction, at least one for each needed approval. Neither of the cited prior art references teaches or suggests the creation or processing of an electronic transaction having a plurality of verifiable anonymous role certificates.

The Rowney patent teaches a three-step approval system wherein a first computer (the customer computer) submits a name and value pair to an administrative function located on a third computer (the merchant computer); the third computer

sends the name and value pair along with identifying certification information to a certification authority on a second computer (a payment gateway); and, the second computer creates a certificate comprising the name and value pair and other certification information. The created certificate is used for authenticating the identity of the customer using the first computer as a party that can pay the stated value. The Rowney patent provides no teachings of verifiable anonymous role certificates being included in any of the communications which are passed among the three computers, as acknowledged by the Examiner. The Rowney communications may include "certification information" and may result in a "certificate" being rendered by the payment gateway for identifying the customer, but there are no teachings or suggestions of an automatically generated electronic transaction comprising an electronic representation of the transaction and at least one verifiable role certificate for each role for which approval is required to be completed to obtain authorization of the transaction.

The Examiner has acknowledged that the Rowley patent does not teach creating or processing an electronic representation of a transaction and further that Rowley does

not teach or suggest the use of verifiable role certificate for each role for which approval is required to authorize a transaction. The Examiner has cited the Sudia patent as providing those teachings which are missing from the Rowley patent.

The Sudia patent teaches an electronic signature authentication system for use with a smart card. The cited teachings of the Sudia patent, from Col. 7, lines 12-35, relate to organizational roles and groups. What Sudia states in the cited passage is that "object classes include organizational role, whose 'role occupant' attribute lists the names of users who occupy the role, and the group of names, whose 'member' attribute lists the names of group members." When a user signs under Sudia, the user also indicates his or her role attribute or member attribute. Sudia then confirms that the signature is authentic.

Sudia does not associate a verifiable anonymous role certificate with a needed approval. Rather, the Sudia user enters a role or member attribute. Further, Sudia does not verify a completed anonymous role certificate by comparison to a stored role certificate with signature. Rather, Sudia simply authenticate the signature of the identified user. If multiple approvals were required under Sudia, then

multiple users would provide their signatures and roles. Sudia expressly teaches that signing users are checked against "allowable names", without anonymity.

Applicants contend that Sudia's use of so-called role attributes or role certificates is not the same as or suggestive of the role certificates of the present invention. Sudia provides role attributes so that signing users can indicate their role along with their signature, facilitating automatic checking against "allowable names", whereas the present invention associates anonymous verifiable role certificates to approvals and incorporates them into an electronic representation of the transaction. Sudia's explicit use of role attributes clearly does not teach or suggest the inventive role certificates as claimed.

Applicants further respectfully assert that the Sudia teachings of a user signing and indicating their role effectively teaches away from the claimed assignment and use of verifiable anonymous role certificates for electronic transactions. It is well established under U. S. Patent Law that a reference that teaches away from claim features cannot be said to obviate the claim language.

Applicants respectfully assert that the combination of Rowley and Sudia does not obviate the invention as claimed.

Since neither Rowley nor Sudia teaches or suggests the creation and use of an electronic transaction having a plurality of verifiable anonymous role certificates, at least one for each role for which approval must be obtained, it cannot be maintained that the combination renders the claim language obvious. Applicants further aver that, even if one were to modify the Rowley patent system with the teachings of Sudia, one would not arrive at the invention as claimed. The combination would result in a modified system wherein the customer computer would submit a name and value pair to an administrative function located on the merchant computer, wherein the name and value pair may include a signature as taught by Sudia, after which the merchant computer would send the name and value pair along with identifying certification information such as a role attribute to a certification authority on a payment gateway; and, the payment gateway computer would employ Sudia's signature verification before creating a certificate comprising the name and value pair and other certification information to authorize the transaction to the merchant. The resulting combination would not, however teach or suggest steps or means for automatically assembling an electronic authorization of a transaction comprising an

electronic representation of the transaction and a plurality of verifiable anonymous role certificates comprising at least one verifiable anonymous role certificate for each of a plurality of roles for which approval is required to obtain authorization of the transaction; distributing the electronic authorization for completion of said plurality of role certificates; extracting completed verifiable role certificates from the electronic authorization; and verifying whether completed role certificates, associated with the authorization, are themselves authentic, as claimed.

Based on the foregoing amendments and remarks, Applicants respectfully request entry of the amendments, reconsideration of the amended claim language in light of the remarks, withdrawal of the rejections, and allowance of the claims.

Respectfully submitted,

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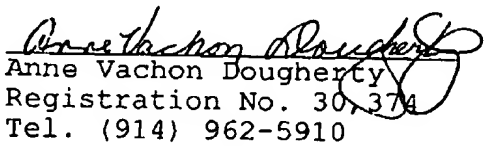
By: 
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